

63,428-063

**IN THE CLAIMS:**

1. (CURRENTLY AMENDED) A ball and socket assembly comprising:  
a socket component including a pair of sockets and a pair of opposed inclined edges, and  
each of said pair of opposed inclined edges defines an opening for each of said pair of  
sockets; and  
a ball component received in each of said pair of opposing sockets.  
*AJ*
2. (CURRENTLY AMENDED) The assembly as recited in claim 1 wherein said ball component includes a ball and an arm, and said ball is received in said socket to allow for pivotal adjustment of said arm, and one of said arm and said ball extends from said opening.
3. (CURRENTLY AMENDED) The assembly as recited in claim 2 wherein said balls are have a diameter of approximately 1.75 inch in diameter and said arms have a diameter of approximately 1.25 inch in diameter.
4. (CURRENTLY AMENDED) The assembly as recited in claim 2 wherein said balls are made of a ball material harder than a socket material of said sockets.
5. (CURRENTLY AMENDED) The assembly as recited in claim 4-1 wherein said sockets are made of aluminum.
6. (CURRENTLY AMENDED) The assembly as recited in claim 2 wherein said sockets extend over more than one half of a surface area of said balls.
7. (CURRENTLY AMENDED) The assembly as recited in claim 1 wherein said socket component includes a first socket clamp half and a second socket clamp half that are secured together to form said pair of sockets.

63,428-063

8. (CURRENTLY AMENDED) The assembly as recited in claim 7 wherein said first clamp halves half and said second clamp half are secured together by a pair of bolts located substantially between said pair of sockets.

9. (CURRENTLY AMENDED) The assembly as recited in claim 7 wherein said first clamp halves half and said second clamp half are secured together by four bolts, one of said bolts being located substantially over one of said sockets, another of said bolts being located substantially under said socket, one of said bolts being located substantially over the other of said sockets, and one of said bolts being located substantially under the other of said sockets.

AJX  
C 6  
10. (CURRENTLY AMENDED) The assembly as recited in claim 7 further including a gap between said first clamp halves half and said second clamp half.

11. (CURRENTLY AMENDED) The assembly as recited in claim 1 wherein each of said pair of inclined opposed edges are inclined approximately 75° from a lower surface edge of said assembly.

12. (ORIGINAL) The assembly as recited in claim 1 wherein said balls are serrated.

13. (CURRENTLY AMENDED) A robotic arm comprising:

a ball and socket assembly including a socket component having a first socket clamp half and a second socket clamp half secured together to form a pair of sockets and a pair of opposed inclined edges, and a pair of ball components each having a ball received in one of said sockets and an arm, and movement of said ball in said socket allowing allows for pivotal adjustment of said arm.

14. (CURRENTLY AMENDED) The robotic arm as recited in claim 13 wherein said balls are have a diameter of approximately 1.75 inch in diameter and said arms have a diameter of are approximately 1.25 inch in diameter.

63,428-063

15. (CURRENTLY AMENDED) The robotic arm as recited in claim 13 wherein said balls are made of a ball material harder than a socket material of said sockets.

16. (CURRENTLY AMENDED) The robotic arm as recited in claim 13 wherein said first clamp halves half and said second clamp half are secured together by a pair of bolts located substantially between said pair of sockets.

17. (CURRENTLY AMENDED) The robotic arm as recited in claim 13 wherein said first clamp halves half and said second clamp half are secured together by four bolts, one of said bolts being located substantially over one of said sockets, another of said bolts being located substantially under said socket, one of said bolts being located substantially over the other of said sockets, and one of said bolts being located substantially under the other of said sockets.

18. (CURRENTLY AMENDED) The robotic arm as recited in claim 13 further including a gap between said first clamp halves half and said second clamp half.

19. (ORIGINAL) The robotic arm as recited in claim 13 wherein said robotic arm includes a plurality of said ball and socket assemblies.

20. (CURRENTLY AMENDED) The robotic arm as recited in claim 13 wherein each of said pair of inclined edges opposed ends are inclined approximately 75° from a lower surface edge of said assembly.

21. (ORIGINAL) The robotic arm as recited in claim 13 wherein said balls are serrated.

63,428-063

22. (ORIGINAL) A method for supporting an object with a robotic arm comprising the steps of:

providing a socket component including a pair of sockets and a pair of opposed inclined edges; and

providing a ball component including an arm and a ball which is received in each of said opposing sockets;

AJD  
pivoting said ball in said socket to allow for pivotal adjustment of said arm; and locking said ball in said socket.

23. (NEW) The assembly as recited in claim 1 wherein each of said openings expose a portion of each of said balls in each of said pair of opposing socket.

24. (NEW) The assembly as recited in claim 1 wherein each of said inclined edges are inclined relative to a lower edge and an upper edge of said socket component.

25. (NEW) The assembly as recited in claim 2 wherein said arm has a range of motion of 90°.

26. (NEW) The assembly as recited in claim 10 wherein said gap is adjustable.

27. (NEW) The robotic arm as recited in claim 13 wherein each of said openings expose a portion of each of said balls in each of said pair of opposing socket.

28. (NEW) The robotic arm as recited in claim 13 wherein each of said inclined edges are inclined relative to a lower edge and an upper edge of said socket component.

29. (NEW) The robotic arm as recited in claim 13 wherein said arm has a range of motion of 90°.

30. (NEW) The robotic arm as recited in claim 18 wherein said gap is adjustable.